



ADAPTIVE BRAIN & BEHAVIOR DESTINATION AREA Request for Concepts (RFC)

The Adaptive Brain and Behavior destination area (ABB-DA) solicits requests for concepts that will utilize transdisciplinary work to advance our vision and strengthen VT as a destination area. Successful RFC awardees will enhance or accelerate an ongoing, ABB-oriented project or stimulate a new project. Multiple awards (up to \$25,000 each) will be funded. **Applications are due 10/15/18.**

ABB Vision: The Adaptive Brain and Behavior Destination Area is focused on the transdisciplinary study of brain plasticity particularly as it pertains to decision-making, physical and psychological trauma, and healthy development across the lifespan. Faculty are working together in this area to build understanding of the brain-behavior relationship in health and the human condition to enhance resilience and well-being in the world's diverse communities.

RFC DESCRIPTION AND GUIDELINES

The ABB-DA is interested in supporting *transdisciplinary teams of faculty from across departments and colleges* whose research or scholarship addresses key issues aligned with our vision and themes.

Applications should be tailored to address one the following thematic research questions:

Decision making:

- What factors engender decision making and brain plasticity in the context of substance abuse, addiction, and other poor health behaviors? What novel therapeutic approaches can be used to affect brain plasticity and prevent relapse?
- What mechanisms underlie decision making among those with optimal health behaviors and mental health, and how are these mechanisms altered among those with poor health behaviors or psychiatric disorders? Can enhanced plasticity improve health behaviors and treatment of psychiatric disorders?

Physical and psychological trauma:

- What are the mechanisms and consequences of changes in the brain that result from physical trauma? What are the resultant behavioral changes and long-term effects on health?
- What are the mechanisms and consequences of changes in the brain that result from acute and chronic psychological trauma? What are the resultant behavioral changes and long-term effects on health?

Development across the lifespan:

- What factors influence plasticity of the brain during typical and atypical development?
- How do changes to the brain (and brain-behavior relationship) during development shape risk, resilience, and competence across the lifespan?

Funded projects are expected to produce deliverable(s) to be specified in the application.

APPLICANT QUALIFICATIONS

Applications are welcome from faculty members in all departments, centers, and programs at Virginia Tech.

APPLICATION GUIDELINES

Applications must include: a) cover sheet listing the project title and investigators, b) a 200 word abstract describing the broader implications of the research topic/project in language suitable for the general public c) project narrative of up to three pages, d) simple itemized budget outline with justification

Required information for the narrative portion of the application includes:

1. Overview and significance of the issue, problem, or situation.
2. Specific aims and analytic design of the proposed investigation.
3. Timeline with list of key project activities and milestones.
4. Primary team members, including identification of the team leader and roles/expertise of other members and consultants (do not submit curriculum vitae).

EVALUATION CRITERIA

Applications will be evaluated on the following criteria:

1. **ABB distinctive content:** Does the project identify distinct content that will advance the ABB vision?
2. **Coherence:** Does the project describe and set reasonable and attainable goals, approach, and milestones?
3. **Transdisciplinary:** Is the team composed of individuals from different departments, institutes, or colleges at VT? Does the team propose a genuinely transdisciplinary project?
4. **Deliverables:** Are there specified deliverables with potential impact?
5. **Fundability:** Does the project offer the potential for securing external funds?
6. **Connectivity to DAs and other SGAs:** How strong is the potential for making links to other Destination Areas or other Strategic Growth Areas? (<http://provost.vt.edu/destination-areas.html>)

EXPECTATIONS AND OUTCOMES

In anticipation of the project outcomes and contributions to the development of the ABB-DA, the teams are expected to:

1. Produce the deliverable(s) specified in the application.
2. Recognize ABB-DA support on any presentation or publication resulting from the award.
3. Engage with the ABB-DA Research Subcommittee during the project duration.
4. Present the results at a colloquium sponsored by ABB-DA.
5. A brief final report must be submitted to the ABB Research Subcommittee.

SUBMISSION REQUIREMENTS/DEADLINE

Applications are to be prepared using 1-inch margins, single spaced, Times New Roman 12 point font. Submit an e-copy of the complete application to Barry Miller (bmiller21@vt.edu) by 5 PM, **October 15, 2018**.

Acknowledgement of receipt of applications will be made within 48 hours.

NOTIFICATION OF AWARD/AVAILABILITY OF FUNDS

Notification of the awards will be made by **November 1, 2018**. Funds will be available immediately, and any unallocated funds as of **July 1st, 2019** are to be returned to the ABB-DA.

BUDGET GUIDELINES

Examples of appropriate use of funds include, but are not limited to, faculty summer stipends, course buy-out, graduate assistantships/tuition, student wages, travel for data collection, interaction with funding agencies, and external consultation/technical assistance. Summer stipends may not exceed \$8,000 inclusive of fringe benefits (<http://www.policies.vt.edu/4296.pdf>). Course buy-outs may not exceed \$7,500. Buy-out policies vary by college; ask department head for specific requirements. Matching funds can be noted if available to increase the research impact, but they are not required.

QUESTIONS: Please contact the ABB Program Manager Barry Miller (bmiller21@vt.edu) or ABB Research Subcommittee Co-chairs: Michael Fox (mafox1@vtc.vt.edu); Matthew Hulver (hulvermw@vt.edu)